

What is claimed is:

1. A method for treating rheumatoid arthritis or other forms of inflammatory arthritis which comprises administering to a subject an amount of an agent effective to inhibit the activation of the CXCR4 receptor by SDF-1.
2. The method of claim 1, wherein the agent is oligopeptide or a polypeptide.
3. The method of claim 1, wherein the agent is an antibody or a portion of an antibody.
4. The method of claim 3, wherein the antibody is a human, a chimeric, an antibody or a humanized antibody.
5. The method of claim 1, wherein the agent is a nonpeptidyl agent.
6. The method of claim 5, wherein the nonpeptidyl agent is a bicyclam.
7. A composition for treating rheumatoid arthritis comprising an effective amount of an agent capable of inhibiting the activation of the CXCR4 by SDF-1 and a pharmaceutically acceptable carrier.
8. The composition of claim 7, wherein the agent is oligopeptide or a polypeptide.
9. The composition of claim 7, wherein the agent is an antibody or a portion of an antibody.
10. The composition of claim 9, wherein the antibody is a human chimeric or humanized antibody.
11. The composition of claim 7, wherein the agent is a

nonpeptidyl agent.

12. The composition of claim 11, wherein the nonpeptidyl agent is a bicyclam.

5

13. A method for determining whether an agent is capable of inhibiting the activation of a CXCR4 receptor by SDF-1 comprising:

10 (a) contacting a cell which expresses CXCR4 receptor in the presence of SDF-1 with an agent under condition permitting activation of the CxCR4 by SDF-1 if the agent is absent; and

15 (b) determining whether that amount of activation of the CXCR4 receptor by SDF-1 is decreased in the presence of the agent relative to the amount of activators in its absence, such a decrease in the amount of activation indicating that the agent is capable of  
20 inhibiting the activation of the CXCR4 receptor by SDF-1.

14. The method of claim 13, wherein the cell is a lymphocyte or monocyte.

25

15. The method of claim 14, wherein the cell is an animal cell.

16. An agent identified by the method of claim 13.

30

17. A composition comprising an amount of an agent identified by the method of claim 13 effective to inhibit the activation of the CXCR4 receptor by SDF-1 and a suitable carrier

35

00500745.020000